

What is a Snatch Recovery?

A Snatch recovery is where a bogged vehicle is recovered by using another vehicle to pull the stuck vehicle free.

A Snatch recovery differs from a normal tow recovery because the line connecting the two vehicles is not tensioned prior to the recovery as in a tow recovery.

A Snatch recovery relies on the elastic properties of the strap to work properly. During a normal snatch recovery, the strap will elongate by around one metre.

A Snatch Strap is a nylon-webbing strap approximately 9m in length and 50-75mm wide with eyelets at both ends. It has a typical breaking strain of 6,500-10,000kg for a standard snatch strap. For other types look up <http://www.tektrek.com.au/>.

It pays to look after your snatch strap as a nick of only 1cm can reduce its breaking strain by over 50%.

The snatch recovery technique requires a second vehicle and a snatch strap to perform the "snatch".

The towing vehicle is positioned to allow around 2m of slack in the snatch strap, while avoiding getting bogged as well. The direction of both vehicles should be lined up as straight as possible and the strap should not be twisted.

Hook the strap to a suitable vehicle tow point using shackles rated to at least 3.25 tonnes.



This picture shows a tree trunk protector (white strap) being used to spread the load evenly on both front recovery points.

CAUTION - Never place a Snatch strap over a towball.

NEVER EVER put the strap over a towball as it is not rated high enough and can break with fatal results (people have actually died this way).



If a towbar is the only rear point available, then remove the towball and use a rated shackle (minimum 3.25 tonne) in the tow ball hole.

Some light duty towbars are unsuitable for snatch recoveries as they are not designed for the high shock loadings that a snatch recovery places on them.

For safety, you should never walk over a snatch strap

Once the vehicles are connected and all bystanders are well out of the way (a minimum of the strap length in **ALL** directions, at least 1.5 times the length of the snatch strap), the bogged driver should signal (by hand, flashing his lights, CB etc) when he is ready. Initially try a small pull as this is usually all that is required as most stranded

vehicles need only a metre or two to clear the obstacle hindering them.

Snatch Recovery

The mobile vehicle should drive off at a steady pace (1st or 2nd low range recommended). The driver of the bogged vehicle should have the engine idling in either reverse or 1st low range (depending on the direction of tow) and as soon as the jerk from the snatch is felt, release the clutch and, hopefully, drive out. In mud it sometimes help to get the wheels of the bogged vehicle spinning as soon as the tow vehicle starts moving. This action tends to reduce frictional drag on the tow vehicle.

Be careful not to run over the snatch strap as you drive off. Stop as soon as you are clear of the boggy area and remove the strap.

If this fails to extricate the bogged vehicle, repeat the process but use more speed when taking off in the mobile vehicle. Alternatively, increase the amount of slack in the snatch strap to 3m.



The cruiser pictured here is bogged and is about to be snatched by the hilux.



The cruiser is in the process of being recovered successfully.

If the towing vehicle cannot be placed close enough without risking bogging it as well, two snatch straps can be joined together. Refer to page three of this document to learn about joining snatch straps easily and safely.

NEVER join the straps using a shackle as this can turn into a "bullet" if either strap or the shackle were to break.

How to join recovery straps.....

ALWAYS USE SNATCH STRAPS WITH EXTREME CAUTION AND ENSURE THAT ONLOOKERS ARE WELL OUT OF THE DANGER ZONE. Place bystanders in a safe position this being at least 1.5 times the length of the snatch strap away from the stranded vehicle and tow vehicle.

Many different methods are used to join recovery straps, i.e. snatch straps, winch extension straps and tree protectors. These methods have ranged from "downright lethal", through "very dangerous" to "acceptable" and "best".

Snatch straps can be **dangerous** if they break during a recovery operation and if more than one is needed and they are joined incorrectly, and they break, or the joint fails then they can be **LETHAL..**

Remember, in all cases where a snatch-strap is used, place a damper on the strap(s) midway between the two vehicles to dampen the strap should it break etc.

The "Do's" and "Don'ts" of Joining Recovery Straps.

DANGER !!!

In this **INCORRECT** method, the end of one strap is inserted through the eye of the other strap and a stick inserted through the eye of the first strap.

The problem here is if the stick or strap breaks. there is nothing left to join the straps and they will fly back with tremendous force cutting through anything in their way. Being inside the vehicle will not guarantee your safety.

This method may be quick but is extremely **DANGEROUS.**



Do not use this method.

DO NOT USE A SHACKLE TO JOIN STRAPS:

DANGER !!!

In this **INCORRECT** method the snatch straps are joined with a shackle.

If the strap breaks then the unbroken strap, and shackle, will fly back toward the vehicle with enough force to cut down anything in its way, including the human body. Being inside the vehicle will not guarantee your safety.

This method may be quick but is extremely **DANGEROUS.**



Do not use this method.

NO !!!

In this **INCORRECT** method the straps are tied together.

If the knot happens to stay tied, then the joint will become incredibly tight and will be almost impossible to untie.

In the more likely event of the knot slipping then the straps will fly apart with great force and anything in their way will be cut down, including the human body. Being inside the vehicle may not guarantee your safety.



Do not use this method.

MUCH BETTER!!!

This is an **ACCEPTABLE** method of joining straps, but is not recommended because the joint will become incredibly tight under use and will be almost impossible to undo.

In this method, the end of one strap is passed through the eye of the other strap and then the other end of the second strap is passed through the eye of the first strap and pulled all the way through to form a strong joint.

This method is acceptable as it will produce a strong joint, but will be extremely difficult to undo after use.



Although this is an acceptable method, the joint will be nearly impossible to undo after use.

A BETTER WAY!!!

This is an **ACCEPTABLE** method of joining straps and is similar to the above method except that a strong stick is inserted, as shown, to prevent the straps pulling tight together. After use, the stick can be removed creating enough slack in the joint to allow easy separation.



This is another acceptable method but the stick will still do damage if it or a strap breaks.

GETTING BETTER!!!

This is an **ACCEPTABLE** method of joining straps and is similar to the above two methods except that a rolled up towel, or similar replaces the stick. After use the towel can be removed creating enough slack in the joint to allow easy separation.



This is the recommended method as the towel is not likely to cause too much damage if one of the straps break.

SAFE AND SIMPLE!!!

To facilitate ease and speed of joining straps in the above acceptable methods, fold your straps in half and roll-up with the eyes on the outside. This will present both ends of the straps when you come to join them and avoid the need to fully unravel one of the straps.



This makes the operation quick and simple.

As a reminder - the end of one strap is passed through the eye of the other strap and then the other end of the second strap is passed through the eye of the first strap. The second strap can then be pulled all the way through the eye of the first strap to form a strong joint. The use of a rolled up towel, or similar, between the straps will make the joint easier to undo and will cause far less damage than a solid stick if something fails during the recovery operation



The dangers of not having a secure recovery point

Picture a Toyota Kluger badly bogged on a beach:



After a considerable time a mate comes to his assistance and joins two snatch straps to snatch him out.



He's obviously going to take one hell of a run up to get plenty of pull on the strap, unfortunately it looks as if there is a non rated shackle attaching the strap to the tow bar, using the trailer safety chain attachment point .

The straps are joined with a 1/2" socket bar and as you are probably guessing, the strap broke and the socket bar was catapulted into the back of the cruiser at lightspeed.



Luckily no one was injured (or worse) but considerable damage was done to both vehicles.



There was a substantial force involved to leave the imprint of the socket bar's knurled handle.



The guy had obviously let his tyres down a bit too far also.



This is where the vehicle was bogged, it had been here all night and its now LOW tide.



The other end of the strap gave the front of the Kluger a workout as well. The Kluger was only a few weeks old. Hopefully a lesson was learnt here, of the importance of the correct way to snatch, and not to use points on the car that are not recovery points **AND NEVER EVER** use a metal object to join straps.